

Frontend guide

Everything you need to know about
HTML, CSS, JavaScript and DOM

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Today frontend is treated as a separate part of Web development and therefore frontend developer jobs are highly wanted. "Frontend guide" is a complete guide for this kind of development with inside look at modern Web technologies and focus on CSS.

Thank you

Before we delve into the wonderful world of frontend development, I would like to give thanks to the family, friends and colleagues who helped me in writing this book: My family (Vlado, Mirjana, Milan and Svetlana), Bella and Steve Guzmán, James Koster, Mladjan Antic and Nenad Gligoric. I've tried my best to make this book as bug and typo free as possible, but I'm sure I've missed some things. If you happen across an error, or would like to offer any other suggestions or feedback, please contact me at [dejanc at gmail dot com](mailto:dejanc@gmail.com).

Sincerely,
Dejan Čančarević

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Introduction

What is frontend

Frontend is a very important part of Web development because it represents visual part of website available to everyone while other parts of web applications are hidden into layers. In other words it represents everything you see when you open a web page.

Who is this book for

This book will teach you how to do frontend development by learning various technologies. You can think of it as a complete guide for this area, describing all key technologies, enriched with lot of real world examples and guidelines. In general many of people think of frontend as the less complex part of Web development when comparing it to some other parts (more about those later) because it is much simpler to use and understand. But this doesn't mean it should be treated differently, after all it is part of every website and visual impression of the user along with rich functionality is most important. The goal of this book is to transform different types of visual design into high quality, optimized and valid frontend code, rich in client functionality. Client functionality is the type of functionality that is being processed on the client side (by the client computer, in Web browser). On the other side server functionality represents all the processes managed by some distant server, usually requested by user. You can learn more about this client-server type of communication in the next chapter.

Goal of the book

Frontend development includes many technologies and most of them are described in this book. From the user of this book it is expected to know basics of key technologies and those are HTML and CSS. Our goal is you to be able to produce high quality code for any kind of layout (page structure). Therefore every chapter starts with

introduction to basic things and then follows up to more advanced examples. At the end of each chapter we will do couple of complex examples mostly taken from real projects. Along with basic code and basic things you will find advanced tips and snippets which you can use in various examples to break out from the usual coding loop that developers get in after some time of coding. This way you should have more open minded approach to problem solving instead of using the usual ideas and techniques. This book is not a reference for learning HTML or CSS. Instead it is a guide on how to use these technologies to develop modern Web pages.

Book structure

The book is divided into four chapters and each chapter represents a large whole that you need to learn in order to proceed because all these parts work together. The longest chapter is about CSS, and accent of the book is on CSS because having good knowledge of CSS will allow you to use other parts with less effort.

First chapter - Frontend

In this chapter you will learn more about frontend, where it is used, how it's used and the history. You will also learn about development tools, Web standards, W3C and importance of developer community.

Second chapter - HTML

In the second chapter you will learn HTML language, as HTML is the basic of the Web. This is an important chapter and you need to understand it completely in order to move on. Along with HTML tags and attributes you will read about coding preparations and use of frameworks.

Third chapter - CSS

This is the longest chapter of the book and it is about learning CSS language, which works together with HTML. Therefore, the HTML chapter is more like an introduction for the CSS chapter. When you complete this part you should be able to build any kind of layout.

DOM is explained in the same chapter in order to understand how all of this works in the background.

Fourth chapter - JavaScript

On top of all this you will learn JavaScript, the most popular scripting language. This chapter explains to you the language basics, key functionalities and detailed description of jQuery framework with examples.

Appendix 1 - Graphics editing

The job of the frontend developer is to convert visual design into code. Therefore, part of this job includes the ability to edit that design. In order to do that you need to know how to use graphic editing tools. You will read about basic Photoshop functionalities required for this kind of job in appendix 1.

Appendix 2 - SEO friendly coding

Our code influences to SEO results (Search Engine Optimization) and here can you can find tips how to write SEO friendly code in order to improve those results.

Using examples

When learning new functionality you will be given a real world example of it. There is programming code available for every example so I strongly recommend creating your own examples while reading the book and comparing the results to the images within those examples. This is the most effective way to learn things.

In the code I will be using clear English names for naming classes, elements and everything else so I recommend you do that same and always comment your code the way you can see it in the following examples. That way it will be much easier for you or anyone else to get around inside the code.

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